

# The Renovator

P E N T A G O N R E NO VATION P R O G R A M

A Pentagon Renovation Program Newsletter

Vol. 7, No. 1 Jan/Feb 2002

# FROM TRAGEDY TO TRIUMPH The Rise of the Phoenix Project

On the morning of September 10, 2001, Pentagon tenants were in the process of moving from their old office space in Wedge 2 into their new homes in Wedge 1. Since the opening of Wedge 1 in March 2001, Pentagon personnel were enjoying the brightly polished Terrazzo floors and taking advantage of the new bank of escalators and eight passenger elevators. The modern systems furniture and larger office bays promised flexibility never before seen in the Pentagon. Overhead, a new sprinkler system went unnoticed. Automated emergency smoke doors were inconspicuously recessed into corridor walls. Blast-resistant window units, an interlocking structure of steel tubes and a geotechnical mesh lay hidden behind drywall inside the Pentagon's outer façade.

On the morning of September 11, hijacked American Airlines Flight 77 slammed into the west face of the Pentagon. The airplane and subsequent blast traveled at a 45-degree angle to the face of the building. It entered Wedge 1 and traveled into Wedge 2 before exiting the C-ring into A-E Drive, allowing the force from the blast to escape upwards, leaving the B-ring untouched.

Of the 2,600 people in the immediate area of impact, 125 did not survive the attack. Over 100 people were injured. The number

of casualties could have been much higher if the Pentagon Renovation Program had not taken the extra measures to enhance the safety and security of Wedge 1. "We are still receiving e-mails, phone calls, letters and other tokens of thanks from people who lived through the attack. They credit the Renovation Program with saving their lives," said Lee Evey, Pentagon Renovation Program Manager.

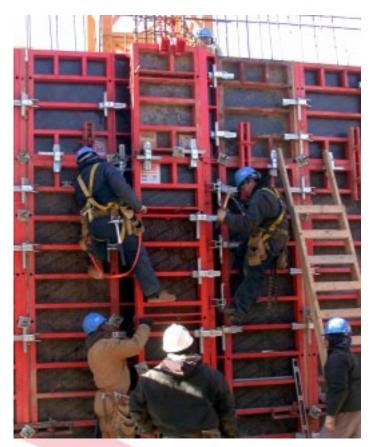
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A construction worker secures formwork for a structural column that will support the third floor.



Concrete is currently being placed for the third floor slab and columns are beginning to rise to support the fourth floor. Aerial photo taken January 3, 2002.



2 Jan 02 - Concrete for the E-ring wall has been placed up to the third floor. In the photo above, formwork is secured before placing concrete. When complete, the outer facade will match the original historic features of the Pentagon.

The Phoenix Team has adopted the image of the mythical bird rising from the ashes of the Pentagon as its logo. "Let's Roll," the words of Todd Beamer, one of the heroes aboard Flight 93, exemplifies the team's attitude towards rebuilding the Pentagon.

# "LET'S ROLL"



11 Sep 01 - Damage was more extensive than the area of visible collapse.



18 Sep 01 - 10,000 tons of debris were removed to prevent further collapse.

# The Rise of the Phoenix Project

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The blast-resistant windows, structural steel reinforcements and Kevlar-like mesh were designed with the intention of protecting people inside the Pentagon from an external explosion. In this case, the plane entered the building and exploded from the inside-out. "The plane performed similar to an armor-piercing round," explains Phoenix Project Manager, Will Colston. "It entered the Pentagon before exploding, however the blast windows and structural reinforcements helped to lessen the impact and prevented the building from collapsing for approximately 30-minutes after impact."

Colston is the man charged with rebuilding the structurally damaged area of the Pentagon. The Renovation Program has dubbed the effort the "Phoenix Project." Colston explains the reference to the bird from Greek mythology, "From the ashes of the worst terrorist attack on American soil, a safer and stronger Pentagon will rise."

The Phoenix Project encompasses the 400,000 square feet of space that required complete structural demolition. "To demolish a structure of this size would normally take anywhere from two to six months," said Allyn Kilshiemer, CEO and Project Manager for KCE Structural Engineering. "We began demolition on October 18. By working 24-hours a day, seven days a week we were able to complete this phase of the project on November 19. Reconstruction began on the same day." The contractors who work on the site consider it a great honor to be a part of the Phoenix Project. Since September 11, the Pentagon Renovation Program has been the recipient of frequent calls from contractors who want to be involved in such a historic undertaking. "The construction community in the United States has taken the attacks and the rebuilding



5 Nov 01 - Full-scale demolition began October 18th.

process personally and everyone wants to be a part of this," asserts Kilshiemer. "This is our way of getting back at the terrorists."

The Pentagon Renovation Program is making extraordinary progress on the Phoenix Project. Just over two months after beginning reconstruction, construction crews have already erected the concrete columns to support the second, third and fourth floors and completed second and third floor slabs. The E-ring façade is beginning to take shape and inner rings are being formed. The goal of the Pentagon Renovation Program is to move Pentagon personnel back into their E-ring offices at the point of impact by September 11, 2002. Colston credits this schedulebeating pace to the single-minded determination of the contractors on the site. "September 11 has definitely been a motivating factor for the workers," Colston said. "When you think about the people who lost their lives in this building, the long hours don't seem like much of a sacrifice."

If there is an overriding theme guiding the work on the Phoenix Project, it is that the success of the project is larger than any one task. Consequently, a visitor to the site might see electricians assisting plumbers or architects working side-by-side with carpenters and masons. Indeed, the whole team from the engineers and management staff to the one thousand various carpenters and laborers on-site seem to have the same picture in mind – a picture of triumph, rising from the ashes of tragedy.

## Next Issue: 9/11 Lessons Learned.

Reconstruction of the entire area affected by the attack will be complete by Spring 2003. For more information on the Phoenix Project, visit the Pentagon Renovation Program's web site, http://renovation.pentagon.mil.



14 Sep 01 - Recovery efforts in progress.



27 Nov 01 - Demo complete, reconstruction underway.



03 Jan 02 - The second deck is poured as columns begin to rise to support the third floor slab.



19 Nov 01 - The first item lifted with the 142-foot tower crane was the Holiday Tree.



28 Dec 01 - Reconstruction is progressing quickly.
Columns to support the third floor have been poured.



4 Jan 02 - formwork for the E-ring wall.

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Media and political interest surrounding the Pentagon Renovation Program and the reconstruction effort continues to be high. Through it all, the men and women working around the clock stay focused and dedicated to building a safer, stronger Pentagon. Included here is a representative sample of activities surrounding the Phoenix Project.



4 Oct 01 - Pentagon Renovation Deputy Program Manager, Mike Sullivan, briefs members of NATO on the Renovation Program's response to the September 11 attack.



10 Oct 01 - Mike Sullivan (center) briefs the Secretary General of NATO, Lord Robertson.



2 Oct 01 - Pentagon Renovation Program Manager, Lee Evey, speaks to members of the press about the progress and plans of the Renovation Program in the wake of September 11.



5 Oct 01 - Over 70 representatives from local, national and international press visit the crash site for the first time. Lee Evey explains how the Pentagon was affected by the attack. In all, approximately 2 million square feet of space were affected.



11 Oct 01 - A memorial service was held at the Pentagon to honor the victims and their families. The Renovation Program began full-scale demolition of the crash site one week later.



19 Nov 01 - Lee Evey is interviewed by Scott Pelley for 60 Minutes II. This is the second time the Renovation Program has been featured on the CBS news program. On this day, demolition was completed and reconstruction began.



6 Dec 01 - Minnesota Governor Jesse Ventura visits the Phoenix Project to thank the construction crews and military personnel for their dedication and hard work.



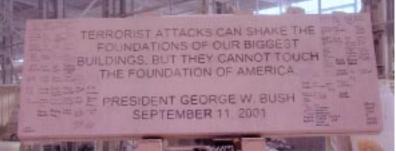
21 Dec 01 - The first shipment of new Limestone was delivered to the Pentagon on the same day as the



29 Nov 01 - Attorney General John Ashcroft speaks to a group from the United States Attorneys' National Convention during a visit to the Phoenix Project.



11 Dec 01 - On the three-month anniversary of the attack, a National Moment of Remembrance Ceremony was held on the Phoenix Project site. Secretary of Defense Donald Rumsfeld, General Richard Myers, Chairman of the Joint Chiefs of Staff, and honored guests salute the flag during the playing of the National Anthem.



Olympic torch. Workers at the Bybee Stone Company in Indiana inscribed a special slab with a quote from President Bush.

# PENTAGON TRANSIT CENTER OPENS

# Security Improvements Balanced Against a "Welcoming Front Door"



1970s - Sept. 2001

Buses and taxicabs used to deliver passengers directly into the Pentagon's center courtvard. of the Metro system in 1977, the bus terminal was moved to the surface level on the Concourse side of the building. The principal reasons for abandoning use of the tunnels by buses were abilities and the penetration of noxious fumes into the

With the arrival

security vulnerbuilding.

The new Pentagon Transit Center increases the distance between vehicles and the Pentagon. The second phase of construction is the addition of a new entrance facility that will provide a secure screening area and house the Pentagon tour and badge offices.

The new Pentagon Transit Center, a facility serving over 34,000 commuters daily, opened December 16, 2001. This signaled the return of Metrobus service to the Pentagon from Pentagon City Mall where it had been temporarily rerouted since September 11, 2001.

The Pentagon Transit Center is part of a multiphase project which implements congressionally mandated security enhancements that were planned long before September 11. The new bus facility increases the distance between buses and the face of the Pentagon by approximately 280 feet.

The opening of the Pentagon Transit Center was a significant milestone for the Washington Metropolitan Area Transit Authority (WMATA) and the Pentagon. Improving transit operations for the tens of thousands of customers utilizing buses, subway, carpool lanes and taxis - all within a parking area designed to accommodate 3,500 cars, certainly proved to be a challenge. Thanks to the collective efforts of area stakeholders including elected officials, state and local transportation agencies, the National Capital Planning Commission, and representatives from the community, including persons with disabilities, the design-build team of Hensel Phelps Construction was able to construct a facility that is safe, comfortable and convenient.

"Regular community meetings and an open dialogue

with the public helped to alleviate concerns about the December 2001 impact of the new Metro Entrance Facility," said Design Man

ager, Mike Yopp. "The facility has been received extremely well and the Transit Center has met and exceeded the expectations of the mass transit users."

The December-January issue of Transit Access Report, a publication that monitors accessibility and mobility issues in public transportation, quoted people with disabilities who described the new Transit Center as "Great," "Impressive," and "Beyond my expectations."

"Ridership through the Pentagon Transit Facility is significant. I feel this is yet another signal that Americans are getting back to business," explained Susan Redshaw, WMATA spokesperson. While several representatives from the disability community have applauded the facilities wider pathways, windscreens and facility aesthetics, there have been some concerns over improper use of the elevator, which is reserved for disabled patrons until the entrance facility opens in November 2002. To minimize elevator misuse and improve commuter time into the Pentagon, Washington Headquarters Service instituted a temporary DoD Shuttle Bus on January 14, 2002 between the Upper Platform of the Pentagon Transit Center and Corridor 2 in South Parking. Until the new Metro Entrance Facility is opened, shuttle service will run from bay U8 to Corridor 2 Monday through Friday between the hours of 7 AM - 9 AM, 11 AM - 2 PM, and 4 PM - 6 PM. The buses are not wheel chair accessible. Persons requiring wheel chair access to the Pentagon from the Transit Center should continue to use the Metrorail Station elevator.

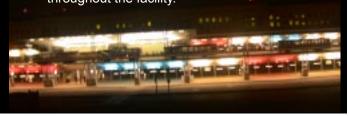
The Pentagon Transit Center, is just the first phase of the Metro Entrance Facility Project. This Department (continued next page)



The escalators from the lower bus platform to the upper bus platform.

#### **MEF HIGHLIGHTS**

- Redundant Vertical Transportation
  - 2 elevators, escalators, and stairways between bus platform levels.
  - 2 new elevators from Metro mezzanine to surface level to replace existing elevator.
- · Pedestrian Weather Protection
  - Complete cover on bus platforms, major walkways, and all escalators and elevators.
  - · Windscreens located at all areas of cover.
- · Easy Transit Connections
  - Pedestrians no longer cross bus traffic to reach "slug" lines, commuter bus services or bike racks.
  - · Facility includes new commuter bus stop.
- · Improved Safety and Security
  - Closed circuit TV monitoring (future).
  - ADA compliant emergency call stations (fure)
  - Increased lighting and phones located throughout the facility.



Project managers covered the lights of the Pentagon Transit Center to create a patriotic red, white and blue scheme to celebrate the opening of the facility on December 16, 2001.



All paths of travel and waiting areas are covered with a self-cleaning, Teflon-coated fiberglass material. Combined with wind screens along the bus platforms, facility users are protected from foul weather.

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# The Pentagon Metro Entrance Facility Project



David O. Cooke, Director of Administration and Management, addresses the crowd gathered to celebrate the grand opening of the new Pentagon Transit Center on December 17, 2001. Seated at right, Congressman Jim Moran and Pentagon Renovation Program Manager, Lee Evey.



The current path of pedestrian travel from the Pentagon Transit Center into the Pentagon.



In Summer 2002, a direct path into the Pentagon will be opened at ground level. Pedestrians will be protected from the surrounding construction site by temporary barrier walls. The route will be similar to the final configuration when the new entrance facility is complete in November 2002.

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of Defense funded effort to increase security includes the construction of a new Pentagon entrance facility, which will open in November 2002. The new entrance will allow direct, above-ground access to the Pentagon from the Transit Center while providing a comfortable and secure entry point for Pentagon personnel. The new entrance will screen all visitors and house the Pentagon Tour Office and the Pentagon Badge Office.

For years the escalators providing direct access from the Metro tunnel into the Pentagon have been described as a "threat delivery tube" by Defense Protective Service (DPS) personnel. The original plan was to leave this bank of escalators in place during construction of the new entrance facility to provide Pentagon tenants a direct path into the building, safe from the surrounding construction. However, in the wake of the September 11 terrorist attacks, DPS deemed the risk too great and the escalator was permanently sealed off.

Commuters entering the Pentagon currently have a long and winding path to travel before gaining access to the building. "This is a temporary inconvenience," said Project Manager, Chuck Malacarne. "A new pathway into the Pentagon will be opened this summer providing pedestrians relief from the walk." Temporary construction barriers and cover from the weather will protect pedestrians from the surrounding work while they enter the building at ground level. "When the entire facility is complete in November, I think everyone will be pleased with the results," said Malacarne.

The Pentagon Renovation Program will continue to disseminate information to keep facility users informed of construction progress and to communicate future project impacts. For frequent updates, photographs and project information, please visit the project web site, http://metro.pentagon.mil.



# PENTAGON RENOVATION PROGRAM UPDATES

#### WEDGE 2

The contract for the renovation of Wedges 2 through 5 was awarded on September 15, 2001 to the design-build team of Hensel Phelps Construction Company. As part of the year-long competition Hensel Phelps was graded on their past performance, innovative solutions and ability to adapt to changing demands - qualities that have become even more valuable in the wake of September 11. Wedge 2, approximately one million square feet, has been reconfigured to return desperately needed office space to displaced Pentagon personnel who are busy planning and executing the war effort. The area between Corridor 5 and Corridor "5.5" is currently being demolished and abated of all hazardous materials including asbestos and lead. When the demolition is complete, nothing will be left of the original structure except for the concrete columns and floor slabs. It will match the structural elements currently being reconstructed as part of the Phoenix project and both areas will undergo tenant fit-out construction at the same time. The section of Wedge 2 currently under renovation will be complete in Spring 2003 with the remainder complete by Fall 2005.

#### PHYSICAL FITNESS & READINESS FACILITY

The Pentagon Physical Fitness and Readiness Facility (PFRF) will replace the existing Pentagon Athletic Facility with a larger, modern facility that meets membership fitness and readiness needs based on current usage patterns and anticipated incremental growth. The 120,000-square-foot facility will be located at basement level underneath and adjacent to the Pentagon's Mall Terrace.

The PFRF will be built in two phases to accommodate the relocation of Pentagon tenants currently occupying a section of the basement which will not be vacated until late 2003.

Options include the design-build of an auditorium, television studio and tech center, senior executive motor pool and mezzanine-level general office space.

Phase One construction will be complete and the new PFRF ready for use by December 2003. The entire project will be complete December 2004.



of renovation and recovery. The worker above removes hazardous material from



**NEXT ISSUE:** Find out what's in store for the new PFRF! In the meantime, please visit **http://renovation.pentagon.mil** for the most up-to-date information.

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# An Introduction to "The Renovators."

The Pentagon Renovation Program, referred to internally as "PenRen," is an operation that relies heavily on teamwork for its success. Of the 350 core staff members, PenRen is comprised of approximately 15 percent government and 85 percent contractor personnel. The people challenged with renovating the nation's military headquarters are some of the best and brightest in their respective fields covering various specialties including acquisition and contracting, architecture and engineering, construction management, health and occupational safety, information management and telecommunications, scheduling and resource management. In addition, PenRen considers all of the stakeholders part of its essential team. PenRen works closely with all of the agencies located in the Pentagon, the Pentagon Building Management Office, Federal Facilities Division, Defense Protective Service, Arlington County, various historical commissions, and several local advisory agencies to ensure that the renovated Pentagon will be completed "On Cost, On Schedule, and Built for the Next 50 Years."

In this regularly scheduled column you will find the stories of the individuals who keep the Renovation Program on track. In this issue we feature the managers ultimately responsible for the success or failure of the most complex renovation project in the history of the

Federal Government.



### Walker Lee Evey, Program Manager, Pentagon Renovation Program

Lee Evey is the man responsible for overseeing the renovation of the entire Pentagon and the senior ad-

visor to the Secretary of Defense and the Deputy Secretary on all matters relating to the renovation. Evey took over the Renovation Program, "the day before Thanksgiving 1997," he fondly recalls. "I had never been involved in a construction project before and I wasn't sure exactly what to expect."

Under Evey's guidance the Renovation Program has become highly regarded for its acquisition strategy and way of doing business. Largely credited with the Program's success, Evey is always quick to pass the credit to those around him. "The dedication and hard work of the men and women on the Renovation Program makes me both honored and priviledged to serve as their leader."

Before September 11, Evey was planning his retirement for January 2002. "I'll be around a little longer than

expected," he says.



#### Michael Sullivan, Deputy Program Manager, Pentagon Renovation Program

Mike Sullivan is the founding father of PenRen's distinguished "Boomerang Club." From 1998 to 1999,

Sullivan served as the Acquisition Team Leader for PenRen, responsible for developing the strategies of all program-wide and project specific acquisitions as well as developing all Renovation Program acquisition policies and procedures. In 1999, he was selected as the Deputy Associate Director for General Services with the responsibility for contracting, mail services, graphics and operation of the receiving facility supporting the Office of the President and the White House complex. However, the allure of the Pentagon was too strong and in September 2000 Sullivan returned to PenRen to serve as the Deputy Program Manager where he is responsible for development and execution of budgets, acquisition strategies and planning and

programming.



### William Colston Phoenix Project Team Leader, Pentagon Renovation Program

Will Colston has the arduous responsibility of leading the second-most watched recovery project in the world, with

the World Trade Center recovery effort being the first. Colston leads a team of about 1,000 contractors who are currently working 20-hours a day, 6-days a week to rebuild the portion of the Pentagon that was structurally damaged by the September 11 attack.

"September 11, 2001 was the worst day, and the best day of my entire life," says Colston. "Obviously, it was the worst because of the attack. I was concerned for the safety of my colleagues and friends at the Pentagon. However, that same morning my wife gave birth to our first son, making me incredibly happy."

Colston previously served PenRen as the Construction Manager for the new Remote Delivery Facility and, later, as Team Leader for the Metro Entrance Facility Project.



#### Charles Malacarne, Metro Entrance Facility Project Team Leader, 3D/International

Chuck Malacarne is responsible for improving the safety and

security of the daily commute for approximately 34,000 mass transit users. His is a position that requires expert juggling skills, necessary to balance the security needs of the Department of Defense with public opinion and political pressure.

"While still in the development phases the Metro Entrance Facility came under a good deal of scrutiny and opposition due to the number of people it would affect," says Malacarne. "However, by the time the new Pentagon Transit Center opened on December 16, some of the project's most vocal opposition had become our most staunch supporters."

Malacarne took over the Metro Entrance Facility Project in March 2001 after serving a term as Construction Manager for the Wedge 1 team.

"I commute to the Pentagon by bus myself," says Malacarne. So, I am especially aware of inconveniences the construction has caused. I remind everyone that the inconveniences are only temporary and the completed facility will be worth the wait."

# Frequently Asked Questions:

**Q:** When will the rebuilding from September 11 be complete?

A: The E-ring, the Pentagon's outer ring, at the point of impact will be reoccupied by the one-year anniversary of the attack. It the Renovation Program's goal is to have Pentagon personnel able to watch the dedication ceremony, planned for September 11, 2002, from their office windows. The remainder of the project will be complete by Spring 2003.

Q: What is the cost for the reconstruction effort?

A:
 It is estimated to cost upwards of \$700 million to recover the entire two million square feet damaged by the attack.

Q: When will the renovation of the entire Pentagon be complete?

Congress recently appropriated an additional \$300 million to advance the renovation schedule. The previous estimated completion date of 2014 is now expected to be acheived by 2010.

# **NEXT QUESTION?**



PLEASE SEND QUESTIONS, COMMENTS, CONCERNS, GRIPES, KUDOS AND COMPLAINTS TO RENOVATION@ARMY.PENTAGON.MIL

A:

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# Moorefield Middle School donates \$10,000 to the Pentagon Recovery Effort

Congress has passed a special authorization allowing the Department of Defense to receive donations specifically designated for the rebuilding of the Pentagon. On January 15, 2002, thirty-three eighth grade students from Moorefield Middle School in West Virginia traveled to the Pentagon with Congresswoman Capito to present Secretary of Defense Donald Rumsfeld with a check for over \$10,000. The students raised the money themselves through various fundraisers held since September 12.



Pentagon Renovation Deputy Program Manager, Mike Sullivan, gives the students and Congresswoman Capito a closer look at how their money may be spent.



## Pentagon Renovation Program

On Cost, On Schedule, Built for the **Next** 50 Years

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The Secretary of Defense and Congresswoman Capito pose with the students of Moorefield Middle School.

While visiting the Pentagon, the students had the opportunity to visit the site of the Phoenix Project and see first hand how their contribution will help to build a safer, stronger Pentagon.

For information about making contributions towards the rebuilding of the Pentagon or the Pentagon memorial, please visit the Renovation Program web site.

# http://renovation.pentagon.mil

The Best Resource for News and Information About the Pentagon Renovation Program



A challenge as complex as renovating the 60-year old headquarters of the United States Military requires careful coordination and effective communication. With the timely dissemination of accurate information in mind, our web site has undergone a renovation of its own. The site, http://renovation.pentagon.mil, is updated regularly with project information, progress photos, news articles and business opportunities.